

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney David A. Dagg, Reg. No. 37,809 on 02/12/2009.

Allowed claims

2. Claims 1-25 are allowed as amended below (See attached interview summary for reason for amendment) :

1. (currently amended) A method for providing network services in an enterprise network, wherein said enterprise network includes a plurality of forwarding domains, comprising:
obtaining at least one end to end network service parameter from an application program;
communicating said at least one end to end network service parameter to a plurality of network service modules, wherein said network service modules are embodied within at least one hardware device including a computer readable memory, each of said network service modules associated with a respective one of said forwarding domains;

~~determining, by said network service modules, whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter; and~~

establishing, by said network service modules, communication paths within each of said forwarding domains, said communication paths within each of said forwarding domains together providing an end to end communication path for a single virtual connection across all of said forwarding domains, such that said communication paths within said forwarding domains are each required to provide network performance for communications over said virtual connection reflecting said at least one end to end network service parameter within their respective forwarding domains.

2. (currently amended) The method of claim 1, further comprising:

obtaining a network service request from said application program, wherein said network service request includes said at least one end to end network service parameter; and

~~determining, by said network service modules, whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter;~~

in the event of a determination by said network service modules that said communication paths within each of said forwarding domains cannot be established to

provide said network performance reflecting said at least one end to end network service parameter, denying said network service request from said application program.

3. (original) The method of claim 1, further comprising establishing, by said network service modules, forwarding information enabling data packets to be forwarded between said communication paths within said forwarding domains.

4. (previously presented) The method of claim 1, further comprising:
determining, by each of said network service modules, network service capabilities of networking devices within said respective associated one of said forwarding domains;
and
wherein said establishing of said communication paths within each of said forwarding domains is responsive to said capabilities of said networking devices.

5. (currently amended) The method of claim 1, further comprising:

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determining, by each of said network service modules, network service capabilities of networking devices within said respective associated one of said forwarding domains; and
wherein said determining whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter is responsive to said capabilities of said networking devices.

6. (previously presented) The method of claim 1, further comprising:

receiving, by an application server program associated with said application program, a request for application service by an application client associated with said application program;

authenticating, by said application server program, said request for application service by said application client; and

in the event that said application server program authenticates said request for application service, obtaining a network service request from the application server portion of said application program, wherein said network service request includes said at least one end to end network service parameter.

7. (original) The method of claim 3, further comprising:

maintaining, by each of said network service modules, an adjacency data structure describing adjacency relationships of said forwarding domains in said enterprise network; and

wherein said establishing of said forwarding information enabling data packets to be forwarded between said communication paths within said forwarding domains is responsive to said adjacency relationships.

8. (original) The method of claim 1, wherein said at least one end to end network service parameter comprises an amount of guaranteed bandwidth.

9. (original) The method of claim 1, wherein said at least one end to end network service parameter comprises a level of acceptable packet loss.

10. (original) The method of claim 1, wherein said at least one end to end network service parameter comprises an indication of network reliability.

11. (original) The method of claim 1, wherein said at least one end to end network service parameter comprises an indication of network delay.

12. (previously presented) The method of claim 1, further comprising, subsequent to said establishing of said communication paths within each of said forwarding domains, monitoring network performance of said communication paths within each respective one of said forwarding domains by said associated network service module.

13. (currently amended) A system for providing network services in an enterprise network, wherein said enterprise network includes a plurality of forwarding domains, comprising:
a plurality of network service modules, each of said network service modules associated with a respective one of said forwarding domains, wherein said network service modules are embodied within at least one hardware device including a computer readable memory, and wherein said network service modules are operative to:
obtain at least one end to end network service parameter from an application program;

determine whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter; and

establish communication paths within each of said forwarding domains, said communication paths within each of said forwarding domains together providing an end to end communication path for a single virtual connection across all of said forwarding domains, such that said communication paths within said forwarding domains are each required to provide network performance for communications over said virtual connection reflecting said at least one end to end network service parameter within their respective forwarding domains.

14. (currently amended) The system of claim 13, further comprising:

a software module operative to obtain a network service request from said application program, wherein said network service request includes said at least one end to end network service parameter; and

wherein said software module operative to obtain said network service request is further operable, in the event of a determination by said network service modules that said communication paths within each of said forwarding domains cannot be established to provide said network performance reflecting said at least one end to end network service parameter, deny said network service request from said application program.

Deleted: wherein said network service modules are further operative to determine whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter; and

15. (original) The system of claim 13, wherein said network service modules are further operative to establish forwarding information in a plurality of networking devices enabling data packets to be forwarded between said communication paths within said forwarding domains.

16. (previously presented) The system of claim 13, wherein said network service

modules are further operative to:

determine, by each of said network service modules, network service capabilities of networking devices within said respective associated one of said forwarding domains; and

wherein said establishment of said communication paths within each of said forwarding domains is responsive to said capabilities of said networking devices.

17. (currently amended) The system of claim ~~13~~, wherein said network service modules are further operative to:

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determine network service capabilities of networking devices within said respective associated one of said forwarding domains; and wherein said determination of whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter is responsive to said capabilities of said networking devices.

18. (previously presented) The system of claim 13, further comprising:

a program module, operative to obtain a network service request from an application server portion of said application program, wherein said network service request includes said at least one end to end network service parameter in the event that said application server program authenticates a request for application service from an application client.

19. (original) The system of claim 14, wherein said network service modules are further operative to:

maintain an adjacency data structure describing adjacency relationships of said forwarding domains in said enterprise network; and wherein said establishment of said forwarding information enabling data packets to be forwarded between said communication paths within said forwarding domains is responsive to said adjacency relationships.

20. (original) The system of claim 13, wherein said at least one end to end network service parameter comprises an amount of guaranteed bandwidth.

21. (original) The system of claim 13, wherein said at least one end to end network service parameter comprises a level of acceptable packet loss.

22. (original) The system of claim 13, wherein said at least one end to end network service parameter comprises an indication of network reliability.

23. (original) The system of claim 13, wherein said at least one end to end network service parameter comprises an indication of network delay.

24. (previously presented) The system of claim 13, wherein said network service modules are further operative to, subsequent to said establishing of said communication paths within each of said forwarding domains, monitor network performance of said communication paths within each respective one of said forwarding domains.

25. (currently amended) A system for providing network services in an enterprise network, wherein said enterprise network includes a plurality of forwarding domains, comprising:

means for obtaining at least one end to end network service parameter from an application program;

means for communicating said at least one end to end network service parameter to a plurality of network service modules, wherein said network service modules are embodied within at least one hardware device including a computer readable memory, each of said network service modules associated with a respective one of said

forwarding domains;

means for determining, by said network service modules, whether said communication paths within each of said forwarding domains can be established to provide said network performance reflecting said at least one end to end network service parameter;
and

means for establishing, by said network service modules, communication paths within each of said forwarding domains, said communication paths within each of said forwarding domains together providing an end to end communication path for a single virtual connection across all of said forwarding domains, such that said communication paths within said forwarding domains are each required to provide network performance for communications over said virtual connection reflecting said at least one end to end network service parameter within their respective forwarding domains.

Conclusion

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger, can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3301.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

/Jude J Jean-Gilles/

Primary Examiner, Art Unit 2443

JJG

February 14, 2009